

**A REVIEW OF *APHILANTHOPS* AND RELATED GENERA**  
(HYMENOPTERA: SPHECIDAE)

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*Aphilanthops* Patton, *Clypeadon* Patton and *Listropygia* Bohart are North American philanthine elements which have been treated previously as subgenera but which seem sufficiently distinct in structure and habits to be treated as genera. As a subtribe Aphilanthopsina, they can be separated from *Philanthus* Fabricius by their nearly straight inner eye margins, and from *Trachypus* Klug by the sessile rather than petiolate abdomen. *Aphilanthops*, *Clypeadon* and *Listropygia* all provision their nests with ants, the first genus using winged forms and the other two selecting workers only. Evans (1962) has summarized nesting behavior and mechanics of ant prey carriage. His conclusions on the "ant-clamp" in *Clypeadon* are especially significant. Other papers of note on *Aphilanthops* in the broad sense have been those of Dunning (1898), Pate (1947), Burks (1951) and Bohart (1959).

The three genera have most of their species concentrated in the southwest United States. The only transcontinental species are in *Aphilanthops*.

With respect to the synonymy, I have examined the types of all of the species names except *Nomada dawsoni* Swenk. Additional description and details of distribution will be found especially in Bohart (1959) and Dunning (1898).

Curators of various collections have been most helpful but I would like to thank especially K. V. Krombein of the U. S. National Museum for his help in connection with the types of *Aphilanthops utahensis* Baker and *A. concinnulus* Cockerell.

Depository collections are indicated by the following symbols: American Museum of Natural History (AMNH), Academy of Natural Sciences at Philadelphia (ANSP), British Museum of Natural History (BMNH), California Academy of Sciences (CAS), California Insect Survey at Berkeley (CIS), Cornell University (Cornell), Canadian National Collection (CNC), University of Kansas (KU), Museum of Comparative Zoology at Harvard (MCZ), University of Arizona (U.Ariz.), University of California at Davis (UCD), University of Nebraska (U.Nebr.), U. S. National Museum (USNM).

KEY TO THE SUBTRIBE APHILANTHOPSINA

1. Antenna distinctly capitate, last four flagellomeres making up swollen part of club; female pygidium with a mediobasal, sharply projecting knob; male sternites III to VII depressed into a densely silver-haired trough; ocellular distance nearly equal to diameter of lateral ocellus; clypeal rim not dentate in either sex ..... **Listropygia** R. Bohart

- Antenna not capitate; female pygidium without a strongly projecting knob; male sternites III to VII not trough-like; ocellocular distance equal to about two lateral ocellus diameters or more ..... 2
2. Pygidium of female plate-like, somewhat "duck-billed" in appearance; clypeal rim toothed toward middle in both sexes; male sternite IV with a distinctive apical hair fringe; postscutellum without an angular lamina overhanging dorsolateral sinus on propodeum ..... **Aphilanthops** Patton
- Pygidium of female greatly enlarged, scoop-shaped, opposed by greatly prolonged and divided sternite VI; clypeal rim of female entire, of male tridentate; male sternite IV without a special apical hair fringe; postscutellum with an angular lamina (under hindwing base) overhanging dorsolateral sinus on propodeum ..... **Clypeadon** Patton

Genus **Aphilanthops** Patton

*Aphilanthops* Patton, 1880. Proc. Boston Soc. Nat. Hist. 20:401. Type: *Philanthus frigidus* Smith, orig. desig.

The simple pygidium of the female, and the apical fringe on sternite IV (as well as V) of the male are distinctive among the *Aphilanthops*-like genera. Four species are recognized, two of which range widely across the country and are known to prey upon winged ants of the genus *Formica*. The other two *Aphilanthops* are strictly southwestern and their prey is unknown.

KEY TO THE GENUS **Aphilanthops**

1. Tergite II with obvious, dense punctures toward dorsal middle; lower carina or edge of forewing articulation area (beneath tegula) angled downward near middle ..... 2
- Tergite II without obvious punctures toward dorsal middle; lower carina or edge of forewing articulation area somewhat sinuate but nearly straight overall ..... 3
2. Flagellum extensively fulvous ..... **frigidus** (Smith)
- Flagellum all black ..... **subfrigidus** Dunning
3. Tergite I with abundant long whitish hair much of which is longer than flagellomere II; latter not depressed toward base beneath; scutum with a pair of large, elongate, discal yellow spots or stripes ..... **foxi** Dunning
- Tergite I with hair inconspicuous (female) or mostly or all shorter than flagellomere II; latter depressed toward base beneath, especially in male; scutum usually all black, discal area sometimes with narrow discal yellow lines ..... **hispidus** Fox

**Aphilanthops foxi** Dunning

*Aphilanthops foxi* Dunning, 1896. Trans. Amer. Ent. Soc. 25:21. Lecto-type male, "San Diego Co., Cal." (ANSP).

This species has been known previously from the type series of four males. I have seen 102 males and 130 females collected from April 18 to May 24 in southern desert areas of California as follows: *Riverside Co.*: 10 mi. S. Garlic Springs (D. Clancy); Palm Springs (P. H. Timberlake); 6 mi. W. Indio (E. G. Linsley *et al.*); Hopkins Well

(J. G. Rozen); 18 mi. W. Blythe (P. H. Timberlake); *San Diego Co.*: Borrego Valley (R. M. Bohart *et al.*); Ocotillo (P. H. Timberlake).

Characteristic are the extensive yellow markings and the striped scutum. The two sexes are remarkably similar in appearance, agreeing even in the three teeth on the clypeal rim and the black band across the head at the level of the ocelli. The female pygidium is yellowish basally but brown otherwise.

#### ***Aphilanthops frigidus* Smith**

*Philanthus frigidus* F. Smith, 1856. Cat. Hym. Brit. Mus., V. 4, p. 475. Holotype male, Nova Scotia (BMNH).

*Aphilanthops bakeri* Dunning, 1896. Canad. Ent. 28:203. Lectotype male, "Colorado" (ANSP), present designation, **new synonymy**.

*Nomada dawsoni* Swenk, 1912. Nebraska Univ. Studies 12:83. Holotype male, Harrison, Nebraska (U.Nebr.).

The 52 males and 66 females of this species which I have seen were transcontinental in distribution as far north as Nova Scotia, Quebec, Wyoming and Washington. Southern limits were Virginia, Michigan, northern New Mexico, Utah and California (Felton, Santa Cruz Co.). Nine males and one female of the above specimens fall within the color form represented by the type of *bakeri* since they have extensive pale markings and mostly whitish pubescence. Males from Albuquerque, New Mexico and Craig, Colorado have been seen with and without parallel discal stripes on the scutum. Markings of *frigidus* vary from whitish to yellow, often in the same population. All of these color variations seem to be identical in structure. A photograph of the pygidium of the female was given by H. E. Evans (1962, fig. 4a). Evans summarized the nesting habits, also.

The pale-marked antenna, angled projection of the upper mesopleuron, and abdominal punctation readily separate the species.

#### ***Aphilanthops hispidus* Fox**

*Aphilanthops hispidus* Fox, 1894. Proc. Calif. Acad. Sci. (ser. 2) 4:106. Holotype male, "San José del Cabo," Baja California (CAS).

Altogether, I have studied 77 males and 44 females of this southwestern species. It occurs in central and eastern Arizona (Santa Rita Mts., Tucson, Sahuarita, Mohawk, Roosevelt Lake, Baboquivari Mts., and Wellton) and Californian desert areas of Inyo, Riverside, San Bernardino, Los Angeles, Imperial and San Diego counties. There is one record from Coalinga, Fresno County. The type specimen from the Cape region of Baja California is the only one known from Mexico.

The structure of the basal flagellomere, which is depressed beneath at the base, is distinctive in the genus.

Males have been collected at flowers of *Baccharis* and *Prosopis*.

**Aphilanthops subfrigidus** Dunning

*Aphilanthops subfrigidus* Dunning, 1898. Trans. Amer. Ent. Soc. 25:21. Lectotype female, "Nevada" (ANSP).

*Aphilanthops elsiae* Dunning, 1898. Trans. Amer. Ent. Soc. 25:23. Holotype female, "Cal." (ANSP), **new synonymy**.

Of this relatively abundant species I have identified 133 males and 97 females. It ranges from coast to coast in New York (Ithaca), Montana, Wyoming, Colorado (Pinecliffe), Idaho (Parma), British Columbia (Goldstream, Robson), Washington, Oregon, Nevada and California. In the last-named state it occurs in mountainous areas at low to moderate elevations as far south as Idyllwild, Riverside County. The markings may vary from whitish to yellow, the former often dominating in dryer regions such as Orovida, Nevada and Green River, Wyoming.

The all-black flagellum, together with the angled upper mesopleural projection and the abdominal punctation, distinguish the species.

Genus **Clypeadon** Patton

*Clypeadon* Patton, 1897. Ent. News 8:13. Type: *Aphilanthops quadrinotatus* Ashmead, monobasic. (= *laticinctus* Cresson).

As postulated by Evans (1962), females in this genus use the modified pygidium and hypopygium in conjunction with the mid and hind coxae to fashion an "ant clamp" in which they lock their prey during transport. Only worker ants of the genus *Pogonomyrmex* seem to be utilized as prey. Eight species of *Clypeadon* are known from the western and southwestern parts of the country, and in northern Mexico.

The excavated but knob-less female pygidium and the presence of special apical fringes on sternites V and following in the male, but not on IV are distinctive in the subtribe. The clypeus in females has a median flange-like lobe which is not toothed; in the male the clypeus has three small teeth near the distal middle. The face in the male is covered by dense, coarse, somewhat appressed silvery hair, with an apicolateral tuft of broadened and darker hair. Both sexes, but especially the females, have a fore-tarsal comb.

KEY TO THE GENUS **Clypeadon**

- |   |   |
|---|---|
| 1. Tergite VI simple; antenna with eleven flagellomeres; males .....  | 2 |
| Tergite VI forming a greatly enlarged and scoop-shaped pygidium, opposed by the greatly prolonged and divided sternite VI; females .....                    | 9 |
| 2. A large smooth area adjacent to dorsoposterior point of eye; no yellow or ivory spot on mandible basally or clypeus laterally .....                      | 3 |
| At most a narrow smooth area adjacent to dorsoposterior point of eye; a yellow or ivory spot on mandible basally; or on clypeus laterally, or on both ..... | 4 |

3. Median vertex tubercle well developed, polished area larger than lateral ocellus; clypeus with usually transverse, submedian ivory spots or a median line; hind tibia dark brown to black, marked with ivory ..... **haigi** (R. Bohart)
- Median vertex tubercle weakly developed, largest polished area less than lateral ocellus; clypeus all black; hind tibia red and ivory yellow ..... **dreisbachi** (R. Bohart)
4. Eye without a conspicuous, adjacent, dorsoposterior smooth strip, area behind eye closely and densely punctate; median vertex tubercle small, if present ..... 5
- Eye with a conspicuous adjacent, dorsoposterior smooth strip; or a large, polished median vertex tubercle; or both ..... 6
5. Wing membrane lightly but distinctly smoky; tergites rather finely punctate; femora and tibiae usually with very little red ..... **californicus** (R. Bohart)
- Wing membrane clear; tergites rather coarsely and closely punctate; femora and tibiae usually extensively red ..... **laticinctus** (Cresson)
6. Sternite V with hair rather extensive but not sharply divided medially .. 7
- Sternite V with a prominent dense hair tuft, sharply divided medially (best seen from rear) ..... 8
7. Clypeus usually with a lateral yellow spot only; femora with very little red; flagellum nearly all black; average body length about 12 mm ..... **taurululus** (Cockerell)
- Clypeus usually all pale or at least banded all across; femora extensively red; flagellum with considerable reddish; average body length about 8 mm ..... **utahensis** (Baker)
8. Punctuation of scutum irregular; median vertex tubercle usually large, polished and more extensive than either lateral area; tergal pale bands complete on I to V; tentorial pits not prominent ..... **evansi** R. Bohart
- Punctuation of scutum rather close and even; median vertex tubercle raised but often punctate, in any case not so extensively polished as either lateral area; tergal pale bands somewhat broken medially; shiny black tentorial pits unusually prominent ..... **sculleni** (R. Bohart)
9. Vertex, including dorsoposterior border of eye, closely and finely punctate except sometimes for a small median vertex tubercle; pale band on tergite IV complete or nearly so ..... 10
- Vertex punctuation somewhat irregular; dorsoposterior border of eye with a very narrow to broad smooth area; median vertex tubercle or other vertex areas often extensively smooth ..... 11
10. Wing membrane lightly but plainly smoky; abdomen usually without red markings and with a complete pale band on tergite III ..... **californicus** (R. Bohart)
- Wing membrane not at all stained; abdomen with extensive red markings and usually with two well separated spots on tergite III ..... **laticinctus** (Cresson)
11. Pygidial margin almost equally trilobed or without any trace of a median lobe ..... 12
- Pygidial margin with a small but distinct median lobe, or at least not evenly concave ..... 13
12. Pygidial margin with median lobe a little narrower but nearly as promi-

- nent as lateral lobes; body ground color mostly red, at least on abdomen; antenna mostly red; smooth strip along dorsoposterior border of eye very narrow, much less prominent than moderate to large median vertex tubercle ..... **utahensis** (Baker)  
 Pygidial margin evenly concave; body ground color dark, antenna mostly dark; smooth area along dorsoposterior border of eye extensive, often broader than median vertex tubercle ..... **haigi** (R. Bohart)  
 13. Ground color on neck and on dorsum of abdomen extensively red ..... 14  
 Ground color on neck and on dorsum of abdomen black to dark mahogany ..... 15  
 14. Frons, scutum and propodeal enclosure black; punctures toward middle of tergite III one or two puncture diameters apart; tergites IV and V with complete pale bands; median vertex tubercle well defined, polished; ocellar triangle not more than its breadth from eye .....  
 ..... **evansi** R. Bohart  
 Frons, scutum and propodeal enclosure red; punctures toward middle of tergite III four or five puncture diameters apart; tergites IV and V with lateral ivory spots; median vertex tubercle weakly defined; ocellar triangle more than its breadth from eye ..... **sculleni** (R. Bohart)  
 15. Clypeus with a pair of horn-like projections toward middle; shiny hump at middle of vertex usually longitudinal; clypeus laterally and mandible base with yellowish spots ..... **taurulus** (Cockerell)  
 Clypeus without horn-like projections; shiny hump toward middle of vertex weakly developed; clypeus and mandible without yellowish marks ..... **dreisbachi** (R. Bohart)

**Clypeadon californicus** (R. Bohart)

*Aphilanthops californicus* R. Bohart, 1959. Ann. Ent. Soc. Amer. 52:108. Holotype male, Davis, California (CAS).

Altogether, I have seen about 60 males and 35 females of this species from Upper and Lower Sonoran localities over the length of the State west of the Sierra, and in Klamath Co., Oregon (Lower Klamath Lake, August, J. Schuh).

**Clypeadon dreisbachi** (R. Bohart)

*Aphilanthops dreisbachi* R. Bohart, 1959. Ann. Ent. Soc. Amer. 52:107. Holotype male, Davis Mts., Texas (CAS).

The 66 males and 65 females which I have studied of this species came from Zacatecas, Jalisco, Nayarit, Queretaro, Durango, San Luis Potosi and Chihuahua in Mexico, as well as the states of Texas (western), Oklahoma and Colorado (Beaver Co.).

The prey was recorded by Evans (1962) as *Pogonomyrmex barbatus rugosus* Emery, based on a record from Zacatecas, Mexico.

**Clypeadon evansi**, new species

*Male*: Length 10 mm, length of forewing 8 mm. Black, marked with clay-yellow as follows: mandible mostly, clypeus except tentorial spot, scape mostly, pronotal collar and lobe, tegula, prescutellar fold, stripes across scutellum and

postscutellum, large propodeal spots, upper mesopleural spot and two smaller ones below it, femora distally, tibiae externally, broad bands on tergites I to V, spots on sternite II, broken bands on sternites III to IV. Reddish brown are: mandible distally, flagellum, spots on femora and tibiae, tarsi, wing veins partly; wing membrane slightly stained. Punctuation moderate, mostly spaced nearly a puncture diameter apart, two or more diameters apart over most of vertex, punctures of scutum rather irregular in size and spacing; dorsoposterior margin of eye narrowly smooth, a large, mostly smooth, median vertex hump. Pubescence generally moderate, thick on gena and thoracic sternum where it is silvery; sternites V to VII with tufts of erect brownish hair, that on V sharply divided medially. Head about as long as broad, least interocular distance about 3.0 times flagellomere I; ocellocular distance shorter than breadth of ocellar triangle, about 2.5 times diameter of lateral ocellus; flagellomere I about 3.0 times its breadth, as long as the two following combined.

*Female:* Length about 12 mm, forewing 9 mm. Markings as in male but with extensive red areas primarily as follows: much of mandible, clypeus, prothorax, propodeum, legs, and abdomen; main black areas are face and back of head, scutum, mesopleuron mostly, mesosternum, propodeal enclosure, tergites IV to V basally; pale markings are ivory and on abdomen are tergal only: pairs of large spots on I to III, broad bands on IV to V. Vertex punctuation about as in male. Pygidium broad, apical margin with a slight but distinct median lobe.

Holotype male (CAS), Rodeo, New Mexico, August 21, 1958, on *Lepidium* (R. M. Bohart). Paratypes, 46 males, 19 females, at or near Rodeo, New Mexico (R. M. Bohart, D. D. Linsdale, P. M. Marsh, G. R. Pitman, R. H. James, R. E. Rice, C. G. Moore, UCD, CAS, USNM, CNC, MCZ, KU, U. Ariz; P. D. Hurd, E. G. Linsley, CIS; M. A. Cazier, AMNH; H. E. Evans, Cornell). Metatypes, 36 males and 18 females from the following localities: NEW MEXICO: Steins, Granite Pass; ARIZONA: Douglas, Apache, Patagonia, Portal, Sabino Canyon, Tucson, 30 mi. S. Safford; CALIFORNIA: 20 mi. S. Darwin in Inyo Co. Collecting dates are from June 4 to September 26. Evans (1962) under "*Aphilanthops (Clypeadon) species A*" has described nest-building and the ant prey, *Pogonomyrmex barbatus rugosus* Emery in the Rodeo, New Mexico area. A miltogrammine parasite, *Senotainia trilineata* Wulp, was recorded by Evans, also. Nectar plants indicated on specimen labels are *Lepidium*, *Baileya pleniradiata*, *Baccharis glutinosa*, *Chrysothamnus*, *Eriogonum abertianum*, *Acacia greggii* and *Haplopappus hartwegi*.

*C. evansi* shows similarities to several other species. In the male it agrees with *utahensis*, *taurus* and *sculleni* in having a smooth dorso-posterior eye border and a median vertex tubercle. From the first two above it differs in having the apical fringe of sternite V broadly interrupted medially. From *sculleni* male the differences in punctuation, abdominal banding and tentorial pit marks, as given in the key, are distinctive. Also, *evansi* is a larger species, averaging 10 rather than 8.5 mm in length. The female is superficially like some specimens of *laticinctus* and the pygidia are similar. However, the shiny vertex

areas of *evansi* are distinguishing. From *sculleni*, with which it keys on the basis of vertex punctation and extensive red markings, there are many points of difference, such as tergal markings and punctation, size of the median vertex tubercle, and especially the ocellocular distance.

The species is named for Howard E. Evans who has contributed so much to our knowledge of the habits of this species and others in the subtribe.

**Clypeadon haigi** (R. Bohart)

*Aphilanthops haigi* R. Bohart, 1959. Ann. Ent. Soc. Amer. 52:106. Holotype male, Sonoita, Arizona (CAS).

The 261 males and 86 females which I have identified as this species were collected in west Texas (El Paso), New Mexico and Arizona as far west as the Grand Canyon and the Baboquivari mountains. Evans (1962) gave details of nests, prey (*Pogonomyrmex barbatus rugosus* Emery), and prey carriage (Evans' fig. 3). A photograph of the female pygidium was given by Evans in his figure 4b.

**Clypeadon laticinctus** (Cresson)

*Philanthus laticinctus* Cresson, 1865. Proc. Ent. Soc. Phila. 5:91. Holotype male, "Col." (ANSP).

*Aphilanthops quadrinotatus* Ashmead, 1890. Colo. Biol. Assoc. Bul. 1:7. Holotype female, "Col." (ANSP).

I have seen about 500 males and 250 females of this relatively abundant and widespread species in western United States. Its range includes Texas (western), New Mexico, Colorado, Utah, Arizona, Nevada, Idaho, Oregon and California (eastern and southern). Since California localities may be critical, they are as follows: *Lassen Co.*: Hallelujah Junction; *Mono Co.*: 11 mi. N. Bridgeport, Hot Creek, Mammoth P. O., Pickel Meadows; *San Bernardino Co.*: Rialto; *Los Angeles Co.*: 9 mi. N. Llano, 8 mi. E. Lancaster; *Riverside Co.*: Riverside, Anza, Temecula; *San Diego Co.*: Warner Springs, Carrizo Creek, Scissors Crossing. Nesting habits were given by Evans (1962). The prey were workers of *Pogonomyrmex occidentalis* Cresson. Nectar plants taken from specimen data are *Bigelovia*, *Asclepias*, *Helianthus*, *Tetradymia* and *Pastinaca*. The species is very similar to *californicus* but even where the ranges of the two overlap, as in the area of Riverside, California, the clearer wings, coarser tergal punctation and extensively red-marked legs of *laticinctus* seem to offer a ready means of separation.

**Clypeadon sculleni** (R. Bohart)

*Aphilanthops sculleni* R. Bohart, 1959. Ann. Ent. Soc. Amer. 52:107. Holotype male, Willcox, Arizona (CAS).



I have studied 33 males and 11 females of this handsome species. It ranges from Mexico (Chihuahua), through west Texas, New Mexico, Colorado, and Arizona as far west as Yuma. The prey was reported by Evans (1962) as *Pogonomyrmex maricopa barnesi* M. R. Smith.

#### *Clypeadon taurulus* (Cockerell)

*Aphilanthops taurulus* Cockerell, 1895. Trans. Amer. Ent. Soc. 22:293. Lectotype male, Las Cruces, New Mexico (ANSP).

*Aphilanthops phoenix* Pate, 1947. Pan-Pacific Ent. 23:66. Holotype female, Phoenix, Arizona (ANSP), **new synonymy**.

The peculiar clypeal horns occur in the female sex only. The laterally spotted clypeus is usually diagnostic among *Clypeadon* males. I have studied 91 males and 41 females from west Texas, New Mexico and Arizona. The prey has been recorded as *Pogonomyrmex barbatus rugosus* Emery by Ainslie (1909).

#### *Clypeadon utahensis* (Baker)

*Aphilanthops utahensis* Baker, 1895. Canad. Ent. 27:335. Holotype male, "S. W. Utah" (USNM).

*Aphilanthops concinnulus* Cockerell, 1896. Canad. Ent. 28:221. Lectotype male, Rincon, New Mexico (USNM), present designation, **new synonymy**.

I have studied 261 males and 100 females of this species from southwestern United States and two localities in Mexico. It is entirely a desert species ranging from southwest Texas through southern New Mexico, southern Arizona, southwestern Utah, southern and western Nevada as far north as Pyramid Lake, and the southern deserts of California ranging into the Owens Valley. The following are specific localities: TEXAS: McNary, Fort Hancock, Sierra Blanca, El Paso; NEW MEXICO: Las Cruces, Rincon, Playas Lake; ARIZONA: Parker, Congress Junction, Willcox, Eloy, Toltec, Clifton, Quartzite; NEVADA: Fallon, Alamo, Nixon, Pyramid Lake, Lovelock, Schurz, Logandale; UTAH: Veyo, Dixie State Park, "S. W. Utah"; CALIFORNIA: San Felipe Creek, Salton Sea, Indio, Palm Springs, Hopkins Well, Whitewater, Thousand Palms, Yermo, Ludlow, Barstow, Rialto, Vidal, Borrego Valley, Santa Catalina Island, Llano, Victorville, Cronise, Johannesburg, Walker Pass, Lone Pine, Bishop; SONORA (Mexico): 2 mi. S. W. Sonoyta; QUERETARO (Mexico): San Juan del Rio. Nectar plants have been reported as *Tetradymia*, *Asclepias* and *Chilopsis*. The ant prey was given by Evans (1962) as *Pogonomyrmex barbatus* F. Smith.

The species is close to *laticinctus* and occasionally occurs with it. Males with red-marked head or scutum are easily identified as *utahensis* but darker specimens of the latter must be separated by the more subtle punctation characters given in the key. Females of

*utahensis* have a distinctive pygidium with a well developed median lobe. Evans (1962) gave a photograph of the female pygidium (as *concinuula*) in his figure 4c.

Genus **Listropygia** R. Bohart

*Listropygia* R. Bohart, 1959. Ann. Ent. Soc. Amer. 52:106. Type: *Aphilanthops bechteli* R. Bohart, orig. desig.

The single species is known to utilize *Pogonomyrmex californicus* Buck as prey (Evans, 1962). Generic features are the scoop-shaped and terminally knobbed female pygidium, subcapitate antennae in both sexes, a concave and hairy trough on sternites III and following in the male, non-toothed clypeal rim in both sexes, and a slightly projecting but not angular lamina over the dorsolateral propodeal sinus.

**Listropygia bechteli** (R. Bohart)

*Aphilanthops bechteli* R. Bohart, 1959. Ann. Ent. Soc. Amer. 52:106. Holotype male, Borrego Valley, San Diego Co., California (CAS).

I have studied 79 males and 53 females of this beautiful species. Collecting dates have been from March 20 to April 29 in the far southern counties of California as follows: *Riverside Co.*: Hopkins Well, Thousand Palms, Edom; *Imperial Co.*: Fish Creek Mts.; *San Diego Co.*: Borrego Valley. Also, I have seen one male from 21 mi. N. Yuma, Arizona (F. D. Parker, UCD). Males have been collected on flowers of *Croton californicus*, *Sphaeralcea ambigua* and *Baccharis*. A photograph of the unique female pygidium was given by Evans (1962) in his figure 4d.

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